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  Selected file: PLUSPAT
   PLUSPAT - (c) Questel-Orbit, All Rights Reserved.
   Comprehensive Worldwide Patents database
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   GB Citations Now Available in PlusPat
   GB citations have been added to over 200,000 corresponding GB records in
   PlusPat. Coverage starts in the 1980's and is updated monthly.
   PlusPat now covers cited references from US, EP, PCT, FR and now GB.
   Last update of file: 2004/02/18 (YYYY/MM/DD) 2004-07/UP (basic update)
?us6340767/pn
  ** SS 2: Results 1
  Search statement
?prt full legalall max
  1/1 PLUSPAT - (C) QUESTEL-ORBIT
  PN - US6340767 B1 20020122 [US6340767]
  TI - (B1) Processes for the preparation of 5-hydroxy-3-oxopentanoic acid
        derivatives
  PA - (B1) KANEGAFUCHI CHEMICAL IND (JP)
  PAO - Kaneka Corporation, Osaka [JP]
  IN - (B1) INOUE KENJI (JP); NISHIYAMA AKIRA (JP)
  AP - US76221501 20010405 [2001US-0762215]
  FD - PCT/JP00/03574 20000602 [2000WO-JP03574]
      - W000/75099 20001214 [W0200075099]
  PR - JP15803399 19990604 [1999JP-0158033]
      - JP2000023804 20000201 [2000JP-0023804]
      - WOJP0003574 20000602 [2000WO-JP03574]
  IC - (B1) C07C-051/00
  EC - C07C-067/343 C07C-069:716
      - C07C-253/30
      - C07D-319/06
      - C12P-007/62
  PCL - ORIGINAL (O) : 554115000; CROSS-REFERENCE (X) : 560174000
  DT - Corresponding document
  CT - Nskata et al., "Synthetic study of marin macrolide swinholide", Chem.
        Pham. Bull., vol. 42, No. 11, p. 2403-05, 1994.
  STG - (B1) U.S. Patent (no pre-grant pub.) after Jan. 2, 2001
  AB - This invention provides a process for producing a
        5-hydroxy-3-oxopentanoic acid, a useful pharmaceutical intermediate,
        easily from a readily available, inexpensive starting material without
        using any extraordinary production equipment such as a
        very-low-temperature reactor.
        Thus, this invention provides a process for producing a
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5-hydroxy-3-oxopentanoic acid

which comprises permitting a lithium amide to act upon a mixture of an acetic acid ester and a 3-hydroxypropionic acid derivative at not below -20 (degree) C. Further, this invention also provides a process for producing a 5-hydroxy-3-oxopentanoic acid which comprises treating a mixture of an acetic acid ester and a 3-hydroxypropionic acid derivative with a Grignard reagent to prepare a mixture of a compound and an acetic acid ester of the above formula and permitting a lithium amide to act upon the mixture at a temperature not below -20 (degree) C. UP - 2002-06 1/1 LGST - (C) EPO PN - US6340767 B1 20020122 [US6340767] AP - US76221501 20010405 [2001US-0762215] ACT - 20040113 US/RF-A REISSUE APPLICATION FILED EFFECTIVE DATE: 20031112 UP - 2004-05 1/1 CRXX - (C) CLAIMS/RRX AN - 3631028 PN - 6,340,767 A 20020122 [US6340767] PA - Kaneka Corp JP PT - C (Chemical) ACT - 20031112 REISSUE REQUESTED ISSUE DATE OF O.G.: 20040113 REISSUE REOUEST NUMBER: 10/705665 EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 1621 Reissue Patent Number: UP - 2004-03 UACT- 2004-01-13 Search statement ?st Session finished: 25 FEB 2004 Time 22:57:46 - Time in minutes: 2,90 The cost estimation below is based on Questel's standard price list Estimated cost : Records displayed and billed : Estimated cost : 1.32 USD 8.32 USD Cost estimated for the last database search : 9.54 USD Estimated total session cost

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File 345:Inpadoc/Fam.& Legal Stat 1968-2003/UD=200408
 (c) 2004 EPO
*File 345: October 12, 2003 - changes to legal status now online.
See HELP NEWS 345 for details.
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DIALOG(R)File 345:Inpadoc/Fam.& Legal Stat
(c) 2004 EPO. All rts. reserv.
15723215
Basic Patent (No, Kind, Date): CA 2305564 AA 20000217 <No. of Patents: 017>
Patent Family:
                           Applic No Kind Date
    Patent No
              Kind Date
                                              A 20000602
    AU 200051043 A5 20001228
                               AU 200051043
                  AA 20000217
                                               A 19990805
                                                            (BASIC)
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                               CA 2339357
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                               EP 99935066
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    US 20030040634 AA 20030227 US 242453
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US 509998

WO 99JP4229

BA 20021029

A1 20000217

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WO 200008011

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A 19990805

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WO 200075099
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Priority Data (No, Kind, Date):
    JP 99158033 A 19990604
    JP 200023804 A 20000201
   WO 2000JP3574 W 20000602
   JP 98221495 A 19980805
   WO 99JP4229 W 19990805
   US 242453 A 20020913
   US 509998 A3 20000816
PATENT FAMILY:
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  Patent (No, Kind, Date): AU 200051043 A5 20001228
    PROCESSES FOR THE PREPARATION OF 5-HYDROXY-3-OXOPENTANOIC ACID
      DERIVATIVES (English)
    Patent Assignee: KANEGAFUCHI CHEMICAL IND
    Author (Inventor): NISHIYAMA AKIRA; INOUE KENJI
    Priority (No, Kind, Date): JP 99158033 A
                                              19990604; JP 200023804 A
      20000201; WO 2000JP3574 W
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    Applic (No, Kind, Date): AU 200051043 A
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    IPC: * C07C-067/343; C07C-069/716; C07C-253/30; C07C-255/21;
     C07B-049/00
    CA Abstract No: * 132(13)166230U; 134(04)041920D
    Derwent WPI Acc No: * C 00-224013; C 01-091183
    Language of Document: English
CANADA (CA)
  Patent (No, Kind, Date): CA 2305564 AA 20000217
    PROCESS FOR THE PREPARATION OF OPTICALLY ACTIVE
      2-(6-(HYDROXYMETHYL)-1,3-DIOXAN-4-YL)ACETIC ACID DERIVATIVES (English
      ; French)
    Patent Assignee: KANEGAFUCHI CHEMICAL IND (JP)
                                                          (JP); MITSUDA
    Author (Inventor): UEYAMA NOBORU (JP); KONDO TAKESHI
     MASARU (JP); YAMADA YUKIO (JP); KIZAKI NORIYUKI (JP); YASOHARA
      YOSHIHIKO (JP); INOUE KENJI (JP); MIYAZAKI MAKOTO (JP); NISHIYAMA
     AKIRA (JP)
    Priority (No, Kind, Date): JP 98221495 A
                                              19980805; JP 99158033 A
      19990604; WO 99JP4229 W
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  Patent (No, Kind, Date): CA 2339357 AA 20001214
    PROCESSES FOR THE PREPARATION OF 5-HYDROXY-3-OXOPENTANOIC ACID
      DERIVATIVES (English; French)
    Patent Assignee: KANEGAFUCHI CHEMICAL IND (JP)
    Author (Inventor): NISHIYAMA AKIRA (JP); INOUE KENJI
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      C07C-069/716
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      (English)
   Patent Assignee: KANEKA CHEMICAL IND CO LTD (JP)
   Author (Inventor): NORIYUKI KIZAKI (JP); YUKIO YAMADA
                                                           (JP);
     YOSHIHIKO YASOHARA (JP)
                                            19980805; JP 99158033 A
   Priority (No, Kind, Date): JP 98221495 A
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 Patent (No, Kind, Date): EP 1024139 Al 20000802
   PROCESS FOR THE PREPARATION OF OPTICALLY ACTIVE 2-
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     PREPARATION DE DERIVES OPTIQUEMENT ACTIFS DE L'ACIDE 2-
     6-(HYDROXYMETHYL)-1,3-DIOXAN-4-YL) ACETIQUE VERFAHREN ZUR HERSTELLUNG
     OPTISCH AKTIVER
     2-(6-(HYDROXYMETHYL)-1,3-DIOXAN-4-YL)-ESSIGSAURE-DERIVATE (English;
     French; German)
   Patent Assignee: KANEGAFUCHI CHEMICAL IND (JP)
   Author (Inventor): KIZAKI NORIYUKI (JP); YAMADA YUKIO (JP); YASOHARA
     YOSHIHIKO (JP); NISHIYAMA AKIRA (JP); MIYAZAKI MAKOTO (JP);
     MITSUDA MASARU (JP); KONDO TAKESHI (JP); UEYAMA NOBORU (JP); INOUE
     KENJI (JP)
   Priority (No, Kind, Date): WO 99JP4229 W
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     C12R-001-78; C12R-001-84; C12R-001-85; C12R-001-13; C12R-001-15;
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 Patent (No, Kind, Date): EP 1104750 A1 20010606
   PROCESSES FOR THE PREPARATION OF 5-HYDROXY-3-OXOPENTANOIC ACID
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     5-HYDROXY-3-OXO-PENTANSAURE-DERIVATEN (English; French; German)
  Patent Assignee: KANEGAFUCHI CHEMICAL IND (JP)
   Author (Inventor): NISHIYAMA AKIRA (JP); INOUE KENJI (JP)
   Priority (No, Kind, Date): WO 2000JP3574 W 20000602; JP 99158033 A
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      6-(HYDROXYMETHYL)-1,3-DIOXAN-4-YL) ACETIQUE VERFAHREN ZUR HERSTELLUNG
     OPTISCH AKTIVER
     2-(6-(HYDROXYMETHYL)-1,3-DIOXAN-4-YL)-ESSIGSAURE-DERIVATE (English;
     French; German)
   Patent Assignee: KANEGAFUCHI CHEMICAL IND (JP)
   Author (Inventor): KIZAKI NORIYUKI (JP); YAMADA YUKIO (JP); YASOHARA
      YOSHIHIKO (JP); NISHIYAMA AKIRA (JP); MIYAZAKI MAKOTO (JP);
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      5-HYDROXY-3-OXO-PENTANSAURE-DERIVATEN (English; French; German)
   Patent Assignee: KANEGAFUCHI CHEMICAL IND (JP)
   Author (Inventor): NISHIYAMA AKIRA (JP); INOUE KENJI (JP)
   Priority (No, Kind, Date): WO 2000JP3574 W
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   IPC: * C07C-067/343; C07M-007-00; C07B-049-00
   Language of Document: English
EUROPEAN PATENT OFFICE (EP)
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EP 1024139	 P	WITH SEARCH REPORT (VEROEFFENTLICHUNG DER ANMELDUNG MIT RECHERCHENBERICHT) 20000920 EP 17P REQUEST FOR EXAMINATION
		FILED (PRUEFUNGSANTRAG GESTELLT) 20000727
EP 1024139	P	20020417 EP AK DESIGNATED CONTRACTING STATES MENTIONED IN A SUPPLEMENTARY SEARCH REPORT: (IN EINEM ERGAENZENDEN RECHERCHENBERICHT BENANNTE VERTRAGSSTAATEN)
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EP 1024139	P	20020417 EP RIC1 CLASSIFICATION (CORRECTION) (KLASSIFIKATION (KORR.)) 7C 07D 319/06 A, 7C 07C 67/343 B, 7C 07C 67/31 B
EP 1024139	P	20030205 EP 17Q FIRST EXAMINATION REPORT (ERSTER PRUEFUNGSBESCHEID) 20021219
EP 1104750	P	19990604 EP AA PRIORITY (PATENT APPLICATION) (PRIORITAET (PATENTANMELDUNG))
EP 1104750	P .	JP 99158033 A 19990604 20000201 EP AA PRIORITY (PATENT APPLICATION) (PRIORITAET (PATENTANMELDUNG))
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EP 1104750	Р	20010606 EP AK DESIGNATED CONTRACTING STATES IN AN APPLICATION WITH SEARCH REPORT: (IN EINER ANMELDUNG BENANNTE VERTRAGSSTAATEN) AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
EP 1104750	P	MC NL PT 20010606 EP AX EXTENSION OF THE EUROPEAN PATENT TO (ERSTRECKUNG DES EUROPAEISCHEN PATENTS AUF)
EP 1104750	Р	AL;LT;LV;MK;RO;SI 20010606 EP A1 PUBLICATION OF APPLICATION WITH SEARCH REPORT (VEROEFFENTLICHUNG DER ANMELDUNG MIT RECHERCHENBERICHT)
EP 1104750	Р	20010606 EP 17P REQUEST FOR EXAMINATION FILED (PRUEFUNGSANTRAG GESTELLT) 20010130
EP 1104750	Р .	20010130 20020410 EP AK DESIGNATED CONTRACTING STATES MENTIONED IN A SUPPLEMENTARY SEARCH REPORT: (IN EINEM ERGAENZENDEN RECHERCHENBERICHT BENANNTE VERTRAGSSTAATEN)
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EP 1104750	P	20020410 EP A4 SUPPLEMENTARY SEARCH REPORT (ERGAENZENDER RECHERCHENBERICHT)

Zucker 6340767 20020226 20020410 EP RIC1 P EP 1104750 CLASSIFICATION (CORRECTION) (KLASSIFIKATION (KORR.)) 7C 07C 67/343 A, 7C 07M 7:00 Z, 7C 07B 49:00 20030409 EP 17Q EP 1104750 FIRST EXAMINATION REPORT Ρ (ERSTER PRUEFUNGSBESCHEID) 20030221 HUNGARY (HU) Patent (No, Kind, Date): HU 200101122 AB 20010828 PROCESS FOR THE PREPARATION OF OPTICALLY ACTIVE 2-(6-(HYDROXYMETHYL)-1,3-DIOXAN-4-YL)ACETIC ACID DERIVATIVES (English) Patent Assignee: KANEGAFUCHI CHEMICAL IND (JP) Author (Inventor): INOUE KENJI (JP); KIZAKI NORIYUKI (JP); KONDO TAKESHI (JP); MITSUDA MASARU (JP); MIYAZAKI MAKOTO (JP); NISHIYAMA AKIRA (JP); UEYAMA NOBORU (JP); YAMADA YUKIO (JP); YASOHARA YOSHIHIKO (JP) Priority (No, Kind, Date): JP 98221495 A 19980805; JP 99158033 A 19990604; WO 99JP4229 W 19990805 Applic (No, Kind, Date): HU 20011122 A 19990805 IPC: * C07D-319/06 CA Abstract No: * 132(13)166230U; 134(04)041920D Derwent WPI Acc No: * C 00-224013; C 01-091183 Language of Document: Hungarian Patent (No, Kind, Date): HU 200103788 AB 20020228 PROCESSES FOR THE PREPARATION OF 5-HYDROXY-3-OXOPENTANOIC ACID DERIVATIVES (English) Patent Assignee: KANEGAFUCHI CHEMICAL IND (JP) Author (Inventor): INOUE KENJI (JP); NISHIYAMA AKIRA (JP) Priority (No, Kind, Date): JP 99158033 A 19990604; JP 200023804 A 20000201; WO 2000JP3574 W 20000602 Applic (No, Kind, Date): HU 20013788 A 20000602 IPC: * C07C-067/343 CA Abstract No: * 132(13)166230U; 134(04)041920D Derwent WPI Acc No: * C 00-224013; C 01-091183 Language of Document: Hungarian NORWAY (NO) Patent (No, Kind, Date): NO 200001703 A 20000403 FREMGANGSM TE FOR FREMSTILLING AV OPTISK AKTIVE 2-(6- (Norwegian) Patent Assignee: KANEGAFUCHI CHEMICAL IND (JP) Author (Inventor): KIZAKI NORIYUKI (JP); YAMADA YUIKO (JP); YASOHARA YOSHIHIKO (JP); NISHIYAMA AKIRA (JP); MIYAZAKI MAKOTO (JP); MITSUDA MASARU (JP); KONDO TAKESHI (JP); UEYAMA NOBORU (JP); INOUE KENJI (JP) Priority (No, Kind, Date): JP 98221495 A 19980805; JP 99158033 A 19990604; WO 99JP4229 W 19990805 Applic (No, Kind, Date): NO 20001703 A IPC: * C12P CA Abstract No: * 132(13)166230U; 134(04)041920D Derwent WPI Acc No: * C 00-224013; C 01-091183 Language of Document: Norwegian Patent (No, Kind, Date): NO 200001703 AO 20000403

FREMGANGSMAATE FOR FREMSTILLING AV OPTISK AKTIVE 2-(6- (Norwegian)

Author (Inventor): KIZAKI NORIYUKI (JP); YAMADA YUIKO (JP); YASOHARA YOSHIHIKO (JP); NISHIYAMA AKIRA (JP); MIYAZAKI MAKOTO (JP);

MITSUDA MASARU (JP); KONDO TAKESHI (JP); UEYAMA NOBORU (JP); INOUE

Patent Assignee: KANEGAFUCHI CHEMICAL IND (JP)

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KENJI (JP)
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    Derwent WPI Acc No: * C 00-224013; C 01-091183
    Language of Document: Norwegian
UNITED STATES OF AMERICA (US)
  Patent (No, Kind, Date): US 20030040634 AA 20030227
    Process for producing optically active
      2-(6-(hydroxymethyl)-1,3-dioxan-4yl)acetic acid derivatives (English)
    Patent Assignee: KIZAKI NORIYUKI (JP); YAMADA YUKIO (JP); YASOHARA
      YOSHIHIKO (JP); NISHIYAMA AKIRA (JP); MIYAZAKI MAKOTO (JP);
     MITSUDA MASARU (JP); KONDO TAKESHI (JP); UEYAMA NOBORU (JP); INOUE
      KENJI (JP)
    Author (Inventor): KIZAKI NORIYUKI (JP); YAMADA YUKIO (JP); YASOHARA
     YOSHIHIKO (JP); NISHIYAMA AKIRA (JP); MIYAZAKI MAKOTO (JP);
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    Priority (No, Kind, Date): US 242453 A
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    Applic (No, Kind, Date): US 242453 A 20020913
    Addnl Info: 6472544 Patented
    National Class: * 549375000
    IPC: * C07D-319/06
    Language of Document: English
  Patent (No, Kind, Date): US 6340767 BA 20020122
    Processes for the preparation of 5-hydroxy-3-oxopentanoic acid
     derivatives (English)
    Patent Assignee: KANEGAFUCHI CHEMICAL IND (JP)
   Author (Inventor): NISHIYAMA AKIRA (JP); INOUE KENJI
    Priority (No, Kind, Date): JP 99158033 A
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    IPC: * C07C-051/00
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    Process for the preparation of optically active
      2-A6-(hydroxymethyl)-1,3-dioxan-4yluacetic acid derivatives (English)
    Patent Assignee: KANEGAFUCHI CHEMICAL IND (JP)
   Author (Inventor): KIZAKI NORIYUKI (JP); YAMADA YUKIO (JP); YASOHARA
     YOSHIHIKO (JP); NISHIYAMA AKIRA (JP); MIYAZAKI MAKOTO (JP);
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   Applic (No, Kind, Date): US 509998 A
   National Class: * 549333000; 549375000
    IPC: * C07D-319/06
   Language of Document: English
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  Legal Status (No, Type, Date, Code, Text):
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WORLD INTELLECTUAL PROPERTY ORGANIZATION, PCT (WO)
  Patent (No.Kind.Date): WO 200008011 A1 20000217
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     DE PREPARATION DE DERIVES OPTIOUEMENT ACTIFS DE L'ACIDE
     2-(6-(HYDROXYMETHYL)-1,3-DIOXAN-4-YL) ACETIQUE (English)
    Patent Assignee: KANEGAFUCHI CHEMICAL IND (JP); KIZAKI NORIYUKI
                     (JP); YASOHARA YOSHIHIKO (JP); NISHIYAMA AKIRA
      ; YAMADA YUKIO
      ; MIYAZAKI MAKOTO (JP); MITSUDA MASARU (JP); KONDO TAKESHI
     UEYAMA NOBORU (JP); INOUE KENJI
                                       (JP)
   Author (Inventor): KIZAKI NORIYUKI (JP); YAMADA YUKIO (JP); YASOHARA
     YOSHIHIKO (JP); NISHIYAMA AKIRA (JP); MIYAZAKI MAKOTO (JP);
     MITSUDA MASARU (JP); KONDO TAKESHI (JP); UEYAMA NOBORU (JP); INOUE
     KENJI
           (JP)
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    IPC: * C07D-319/06; C07D-319/08; C07C-059/90; C07C-051/353;
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      C12R-001-84; C12R-001-85; C12R-001-13; C12R-001-15; C12R-001-01
    Language of Document: Japanese
  Patent (No, Kind, Date): WO 200075099 A1 20001214
    PROCESSES FOR THE PREPARATION OF 5-HYDROXY-3-OXOPENTANOIC ACID
      DERIVATIVES PROCEDES DE PREPARATION DE DERIVES D'ACIDE 5-HYDROXY-3-
      OXOPENTANOIQUE (English)
    Patent Assignee: KANEGAFUCHI CHEMICAL IND (JP); NISHIYAMA AKIRA
      ; INOUE KENJI (JP)
    Author (Inventor): NISHIYAMA AKIRA (JP); INOUE KENJI
    Priority (No, Kind, Date): JP 99158033 A
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    Filing Details: WO 100000 With international search report
    IPC: * C07C-067/343; C07C-069/716; C07C-253/30; C07C-255/21;
      C07M-007-00; C07B-049/00
    Language of Document: Japanese
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